

REMARKS/ARGUMENTS

This Amendment is in response to the Office Action dated October 14, 2004. Claims 1-21 are pending. Claims 1-10, 17, and 19-21 are objected to. Claims 1-21 are rejected. Claims 1, 8, 10, 17 and 19 have been amended. Claim 3 has been cancelled. Accordingly, claims 1-2, and 4-21 remain pending in the present application.

Claim Objections

The Examiner states,

1. Claims 1-10 are objected to because of the following informalities: (1) the word “panel” in line 4 of claim 1 should be “plate”; (2) the phrase “the spacebar” of lines 1-2 of claim 8 should be “a spacebar.”

2. Claim 17 is objected to because of the following informality: the phrase “the spacebar” of lines 1-2 should be “a spacebar”.

3. Claims 19-21 are objected to because of the following informality: the phrase “the panel” should be “the plate” in line 6 of claim 19. Appropriate correction is required.

Applicant has made corrections in claims 1, 8, 17 and 19 in accordance with the Examiner's comments.

Claim Rejections – 35 USC 102

The Examiner states,

5. Claims 1, 2, 4, 5, 9-14 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Liu (U.S. Publication 2004/0017688).

Regarding claim 1, Liu discloses an illumination device for backlighting panels. The device includes a plate for dispersing light (reference number 10), and at least one light-emitting diode (reference number 14, paragraph 0023) coupled to the plate for providing the dispersed light (Fig. 1), wherein the panel (plate) is coupled to a keyboard (Fig. 5), the at least one LED is located under a portion of the keyboard such that when the at least one LED is illuminated, the light from the at least one LED does not distract a user (Fig. 5).

Claim Rejections-35 USC 103

The Examiner states,

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Chiang (U.S. Publication 2004/0008505A1).

Regarding claim 3, Liu does not disclose a plurality of optical fibers. Chiang discloses the plate including a plurality of optical fibers for dispersing light (Fig. 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the plurality of fibers of Chiang in the apparatus of Liu to couple light to the edge of a light guiding plate. See Fig. 3A of Chiang.

Applicant respectfully disagrees.

Present Invention

A light guide panel is disclosed. The panel comprises a plate for dispersing light and at least one light-emitting diode (LED) coupled to the plate for providing the dispersed light. The plate includes a plurality of optical fibers for dispensing light. The plurality of optical fibers is completely within the plate. When the panel is coupled to a keyboard, the at least one LED is under a portion of the keyboard such that when the at least one LED is illuminated, the light from the LED does not distract a user. Accordingly, by strategically placing LEDs within the panel and providing the LEDs under appropriate portions of the keyboard, the device utilizing the keyboard can be smaller than when a conventional light guide panel is utilized. In addition, a further improvement in illumination is provided when a mechanism is provided which reflects light escaping from the edges of the panel back into the panel.

Applicant has amended independent claims 1, 10 and 19 to recite “a plate for dispersing light, wherein the plate includes a plurality of optical fibers for dispensing light, wherein the plurality of optical fibers being completely within the plate.”

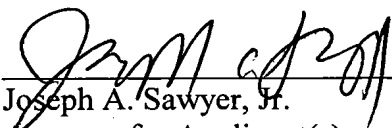
Examiner acknowledges that Liu does not disclose a plurality of optical fibers. Chiang does include a plurality of optical fibers but as shown in Figures 3A and 3B of Chiang the fibers 24' are outside of the panel 21. Accordingly, the combination of Liu and Chiang discloses a plurality of optical fibers from outside the panel with an LED providing light through a firewall similar to the prior art Figure 1 disclosed in the present application (copy attached). This combination would lead to inefficient lighting issues along with increasing the size of the panel when utilizing such a plate. As is seen in Figures 2, 3 and 4B (copies attached) the optical fibers are completely internal to the panel therefore these issues are not present in the recited invention.

Claims 2, 4-9, 11-18 and 20 are also allowable since they depend from an allowable base claim. Accordingly, Applicant respectfully requests reconsideration and allowance of the claims as now presented.

Applicants' attorney believes this application in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Respectfully submitted,
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